

Appl. No. 09/802,654

IN THE US PATENT AND TRADEMARK OFFICE

Appl. Number: 09/802,654 ✓  
Filing Date: 03/08/01  
Applicant: Nguyen, Tranh T.  
Appl. Title: High Efficiency Switching Amplifiers  
Art Unit: 2817  
Examiner: Shingleton, Michael B.

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Rohnert Park, CA

AMENDMENT

COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington DC, 20231

Sir,

In response to the Office letter mailed 06/07/2002, please kindly amend the specification as follows:

In the Claims:

Please replace the entire section of claims as follows:

1. A high efficiency switching amplifier for digitally processing electric power from a DC supply thereof to a loudspeaker, the switching amplifier comprising:
  - a voltage source for supplying a DC voltage,
  - a power modulator for transforming the DC voltage into modulated voltages,
  - at least one transformer for changing the amplitudes of the modulated voltages,
  - a synchronous demodulator for reconstructing the modulated voltages back to audio signal driving a load comprising a loudspeaker,
  - a controller for receiving an audio signal to produce digital signals controlling the operation of the power modulator and the synchronous demodulator,wherein the controller controlling the timing of digital signals to both the power modulator and the synchronous demodulator such that they change state substantially synchronously.
2. The switching amplifier of claim 1 wherein the transformer comprises a center-tapped secondary winding which has a first and a second terminals and a center-tapped terminal, and the synchronous demodulator comprises:
  - a first and second switches for selectively connecting the first and second terminals of the transformer to a ground reference,



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